Directions: Not all the following essays will follow the AEC format, but try and identify the assertion, evidence and commentary. Underline the assertion, [bracket] the evidence, and circle the commentary. Then, read the following student essays from the 2008 test and assign a score based on the rubric. Note the word count and supported assertions in the essay as you read.

Q2SB Score \_\_\_\_\_\_\_

In the passage from “The Great Influenza,” John M. Barry writes about how science cannot be observed or forced to yield an answer, but observed on the frontier. He uses rhetorical strategies such as repetition, ironical tone, and rhetorical questions to give a humble account on what he thinks about how real science should be sought out in nature, and your own soul.

Barry uses repetition such as “Certainty creates strength. Certainty gives one something upon which to lean” to give the effect of how important it is to have certainty and confidence in yourself in order to make you feel strong and supported. If a scientist is sure about something, he is sure to be much more confident on his ideas and beliefs.

In this passage, Barry uses a periodic sentence in which he tries to keep the reader wondering about things before his present idea. “And just as Einstein refused to accept his own theory until his predictions were tested, one must seek out such findings.” Barry is using Einstein-the master genius of the 20th century—as an example of how he often thought that his theory wasn’t real until he tested it. In stating “one must seek out such findings” at the very end, adds that everyone has to test their theory (even Einstein) in order to accept that it is true.

In the middle of Barry’s passage, he uses many rhetorical questions to ask and ponder what would be the best way to be certain and “prove” their theory is true. “Would a pick be best, or would dynamite be better—or would dynamite be to indiscriminately destructive?” In this question, Barry is trying to ask in an indirect way if it would be better to pick away at a theory little by little or all at once “dynamite.” He leaves that for the reader to decide.

In this passage, Barry uses many rhetorical terms to characterize the natural scientific research to cause the reader to have an open mind about the subject and ponder on how certainty can lead to success. (346 Words)

Q2SE Score \_\_\_\_\_\_\_

Scientist are among the most important professionals in modern society. Through methodic, empirical research, they gather data and draw conclusions based on discovered correlations or causations. Although somewhat robotic, their method (appropriately called the “scientific” method) is something in which many see great beauty; or, as John Barry notes in The Great Influenza, something that requires “strength deeper than physical courage.”

Barry describes scientists in a respectful, perhaps even reverent, way. His point, essentially, is that theirs is the most tedious of all grunt work; that which scientist must do, and yet, there exists within it a methodic beauty. Being a scientist requires intellectual bravery and courage, to the extent that uncertainty is strength. In the first two paragraphs, Barry emphasizes this point of view with masterful use of figurative language. The first four sentences combine repetition, parallel structure, and floating opposites (antithesis) to sharply distinguish between certainty and uncertainty. He illustrates, through his repetition and antithesis, that scientists, although disadvantaged in that they don not operate with solid facts (as, do, say mathematics), they use said uncertainty to fuel their effective method and make discoveries; the likes of which most cannot even fathom. It is this uncertainty, as his second paragraph’s parallel structure points out, that is their strength; this absolute “lost” feeling is why their discoveries are so important, because they’re so incredibly novel that they’re completely unfathomable.

The third paragraph analyzes further the scientist’s strength, helped in its efforts by the author’s appeal to pathos and ethos. He alludes to Einstein to point out the necessity of scientific critique, and he characterizes scientific strength as glorious in all its manifestations. The author further emphasizes this point through his use of analogies and an extended metaphor in the fifth paragraph, defining science as essentially the study of tools; of efficiency and refined precision. This serves to underline his previous point about the beauty of the scientific method, again emphasized at the end of the passage. Barry notes that the more that’s known, the higher the stakes. When humanity stumbled upon the electron, it was like bumping into a lamp in a dark room; once we discovered its significance (which is initially entirely unknown), an entire world opened up (electronics), and the room brightened.

Barry characterizes scientific research as painstakingly precise, like looking for the molecular composition of a needle in a haystack stuck in a dark room. Yet if this unknown, this x-factor, that sets the stakes, for, as many have observed, nothing gained without risk is worth gaining. The overpowering futility of their efforts is what makes science so beautiful; because while futile, at least it is methodically and scientifically futile; so that when discoveries are made, we can be certain they will consist of nothing less than compacted greatness. (463 Words)

Q2SC Score \_\_\_\_\_\_\_

Although this essay was written about the 1918 flu epidemic, John M. Barry’s apt words invites the readers to have a better understanding of a Scientist’s research. His word choice and metaphors patiently pave a road of understanding for readers to better grasp what scientists see.

Barry calmly explains that “…to be a scientist requires not only intelligence and curiosity, but passion, patience, creativity, self-sufficiency, and courage,”(lines 6-8) with characteristics that he shows throughout this essay. With his creative and intelligent form of writing the reader is pulled into the world of a scientist. Barry makes it easy for one to relate to scientist and connect with their same passion.

Barry’s use of metaphors helps explain to readers the though process of a scientist. “A single step can also take one off a cliff.” shows the reader the importance of a scientist research (line 35).

John M. Barry’s didactic way of speaking helps a reader to understand something that they may not normally be able to connect with. His metaphors make up great examples of what scientist may normally be faced with awed gaining the readers attention. (187 Words)

Q2SD Score \_\_\_\_\_\_\_

In the passage, author John M. Barry characterizes scientists and what it takes to be a successful researcher. He uses anaphora, metaphors, and rhetorical questions in order to demonstrate his point that ultimately succeeding in scientific research requires patience and the ability to have courage and accept the inevitable uncertainty that accompanies science.

To be a scientist is to be uncertain, to be patient, to be an inquirer. But, it is also more: “It is not the courage to venture into the unknown. It is the courage to accept—indeed, embrace—uncertainty” (8-10) A scientist is going to be uncertain, but it is the act of acknowledgement and embracing that uncertainty that allows great scientific research to exist. Barry utilizes anaphora with “It is” in order to re-iterate his point, in order to fully define “uncertainty.” It takes courage to be uncertain, and that is Barry’s point. Barry continues on and begins referring to scientific research as a “wilderness region where [scientists] know almost nothing, where the very tools and techniques needed to clear the wilderness, to bring order to it, do not exist.” (26-29) Barry uses this metaphor to illustrate the difficulties that accompany research and scientific progress and to stress the importance of having patience when dealing with those difficulties. Referring to research as a “wilderness” allows the reader to imagine just how tangled and treacherous progress can be. Research is “grunt work, tedious work,” but it has to be patiently done. Barry further demonstrates his point through rhetorical questions when discussing how best to analyze a rock: “would analyzing the water after it passes over the rock reveal anything useful? How would one analyze it?” (46-48) Rhetorical questions need no answer, but they do show that a scientist must question things patiently, that they must inquire when they are uncertain. Scientific research requires that a scientist does so.

Science is uncertain and it is tedious. For research to be successful, a scientist must cope. A scientist must be patient and they must be courageous enough to acknowledge the undeniable uncertainty and embrace it.

John M. Barry firmly believes in all of those concepts, and he uses several well-crafted strategies to stress their importance to the reader. (369 Words)